Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Service Area Background Information

Service Area Description

This service area implements programs that address chronic diseases that have serious long-term health and social consequences. Chronic diseases including cardiovascular disease (heart disease and stroke), cancer, diabetes and oral diseases are among the most prevalent, costly, and preventable of all health problems. In spite of improvements in prevention in oral health, dental caries (tooth decay) remains the most common chronic disease in Virginia's children.

Products and services include:

- Addressing environmental and policy strategies that affect chronic diseases as well as oral health policies and plans;
- Working with partners to affect change in systems which influence the prevention or control of chronic diseases including access for persons living with disabilities;
- Encouraging healthy lifestyles and addressing risk factors that affect multiple chronic disease states;
- Developing culturally appropriate chronic disease prevention self-management strategies;
- Planning, promoting, and implementing chronic disease prevention training events to develop and enhance partners' knowledge and skills;
- Coordinating resources and messages for media campaigns;
- Supporting communities through grants or agreements for chronic disease initiatives;
- Collaborating across individual disease prevention project areas to achieve a state comprehensive chronic disease prevention approach;
- Developing education, training and oral health promotion programs targeted to school age, maternal, early child and adult/older adult populations;
- Developing, administering and monitoring prevention programs utilizing topical and systemic fluorides to reduce the incidence of tooth decay; and
- Providing technical assistance to local health departments and communities regarding chronic disease intervention and regarding the practice of dentistry through site reviews, recruitment and orientation of staff.

Service Area Alignment to Mission

This service area directly aligns with the Virginia Department of Health's mission to promote and protect the health of Virginians by addressing behaviors that promote good health and reduce the development of chronic disease including oral disease. The VDH mission is also supported through providing quality assurance of local health department clinical dental programs and developing population based oral health prevention programs.

Service Area Plan Page 1 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Service Area Statutory Authority

§32.1-2 of the Code of Virginia states that VDH shall administer and provide a comprehensive program of preventive, curative, restorative and environmental health services, educate the citizenry in health preservation of the public health" and collect and preserve health statistics.

§32.1-11.3 of the Code of Virginia establishes the authority for the development of community health education services including health promotion and disease prevention efforts.

§32.1-23 of the Code of Virginia provides for the publication and distribution of disease prevention information.

§32.1-73.5 and §32.1-73.6 of the Code of Virginia charges the Commissioner with developing, maintaining, and revising a written state plan for reducing the rate of hospitalizations due to asthma and facilitate the effective management of persons with asthma.

§32.1-70 and §32.1-71 of the Code of Virginia require the VDH to maintain a population-based central cancer registry based on reports from hospitals, clinics, pathology laboratories, and physicians.

The Virginia Waterworks Regulations §12VAC 5-590 et seq., effective date November 15, 1995 govern the design, maintenance and operation of waterworks in the Commonwealth and serve to implement the Safe Drinking Water Act 1996 (42 U.S. C. 300f et seq.) and the National Primary Drinking Water Regulations (40 C. F. R. Part 141.) §32.1-12 and 32.1-170 Code of Virginia and corresponding sections of Virginia Waterworks Regulations describe fluoridation of water systems.

Federal EPA Regulations Title 40-Protection of Environment Chapter I — Environmental Protection Agency Part 141--National Primary Drinking Water Regulations (7-1-2002 edition) §141.24-141.25, §141.31 and §141.203-208 provide regulations regarding organic contaminates specific to fluoride, including mandatory templates for exceeding primary Maximum Contaminant Level And Secondary Maximum Contaminant Level.

Service Area Plan Page 2 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Service Area Customer Base

Customer(s)	Served	Potential
Adults with Disabilities	44,701	894,011
Coalitions and Partnerships, including faith-based organizations	82	82
Department of Education School Nurses	184	1,373
Early Childhood Staff (Early Head Start, Head Start, WIC)	45	400
Health Organizations: Cancer Reporting Facilities	158	158
Health Organizations: Health Districts	35	35
Health Organizations: Non-governmental health organizations	38	38
Health Professionals	458	458
Individuals Receiving Adjusted Fluoride in their Water System	5,858,921	6,713,874
Individuals with community water systems that upgrade fluoride equipment	66,281	3,797,314
Local Health Department Dental Staff (dentists, hygienists, assistants)	100	100
Low Income Adults	8,000	239,000
Low Income Children Enrolled in Head Start/ Early Head Start Programs	283	13,000
Low Income School Children	68,000	371,354
Population At Risk: Adults (age 50+) in need of Colorectal Cancer Screening	60,229	1,204,563
Population At Risk: Adults who do not Engage in Physical Activity	68,189	1,363,366
Population At Risk: Adults who Smoke Cigarettes	63,978	1,279,552
Population At Risk: Men (age 50+) in need of Prostate Cancer Screening	21,069	421,369
Populations At Risk: Adults who had a Heart Attack	9,220	184,390
Populations At Risk: Adults who had a Stroke	5,588	111,752
Populations At Risk: Adults with Arthritis	71,521	1,430,470
Populations at Risk: Adults with Asthma	21,233	424,655
Populations At Risk: Adults with Diabetes	20,116	402,305
Populations At Risk: Adults with High Blood Pressure (hypertension)	70,963	1,419,242
Populations At Risk: Adults with High Cholesterol	93,872	1,877,422
Private Practice Dentists (including members Virginia Dental Association)	601	3,000
School Children (grades 1-6) no access to community water fluoridation	45,000	75,000
Students at School Dentistry/Dental Hygiene	308	498
VDH District Health Directors	25	35

Service Area Plan Page 3 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Anticipated Changes In Service Area Customer Base

- Any new legislation related to chronic disease could affect the service area customer base. For example, an increase in the state tobacco excise tax could reduce the number of existing smokers as well as new smokers.
- The Tobacco Use Control Quitline became functional in November 2005. The Quitline offers free smoking cessation counseling for income-eligible clients and educational materials and insurance referrals to all others. It is anticipated that the current smoking prevalence rate will decline as a result of the Quitline.
- Most VDH chronic disease prevention activities exist due to grants received. As grants are received or discontinued, the actual number of customers served will change based on the availability of funding for outreach.
- Nationally, an increase of 300,000 children ages 0-19 is anticipated in the next decade, and this growth is expected to be greatest in lower socioeconomic groups who are at highest risk for dental decay. As these populations grow and access to dental professionals continues to be an issue, the gap may increase for children with oral health disparities with a corresponding need for prevention services.
- In a 1997 study by VDH, 13.3 percent of Head Start Children were found to have early childhood dental caries. Although Virginia has a long history of prevention, most health promotion resources have been targeted primarily at the school population with limited resources devoted to the preschool population. With categorical grant funding in FY 2006 and 2007, Virginia will train other health professionals and begin programs to apply fluoride varnishes to the preschool population.
- Research is now showing that oral health status of the mother may impact the birth outcomes of the child. In FY06 VDH began work with high risk maternity patients to ensure a dental component and education for these customers as well as other adult oral health issues.
- The urbanization and changing demographics within rural communities has created a demand for small water systems to expand public health services including fluoridation. As water systems grow in response to increasing population, and add wells and pipelines, these systems will require new fluoridation equipment or upgrades of existing equipment. These changes will impact the customer demand for fluoridation in the future.

Service Area Plan Page 4 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Service Area Products and Services

• Major projects/programs include: Virginia Arthritis Project (VAP), Virginia Asthma Control Project (VACP), Comprehensive Cancer Prevention and Control Project (CPCP), Virginia Cancer Registry (VCR), Cardiovascular Health Project (CVHP), Diabetes Prevention and Control Project (DPCP), Tobacco Use Control Project (TUCP), Oral Health Education, Training and Health Promotion, Community Water Fluoridation, School

Health Education, Training and Health Promotion, Community Water Fluoridation, School Fluoride Rinse Program, Oral Health Data Surveillance and Evaluation, and the Bright Smiles for Babies Fluoride Varnish Program.

This service area also addresses issues such as physical activity, nutrition, cultural competency and diversity, and promoting health among persons with disabilities. Services include:

Monitor Health Status:

- Periodically review available data sources for chronic disease information, including cancer diagnosis, death records, hospital discharges and risk behavior survey findings.
- Identify, collect, and analyze data to determine: 1) the leading causes of death, illness, and disability due to chronic diseases in Virginia, 2) specific groups who are at higher risk, 3) the extent of risk factors that contribute to chronic diseases, 4) the self management practices of Virginians with chronic diseases, and 5) the economic impact of chronic diseases.
- Develop surveillance data systems where none exist, if feasible. Create and implement new tools and surveys to collect additional data necessary for chronic disease program planning.
- Develop and disseminate publications, reports and fact sheets on the burden of chronic diseases in Virginia.
- Educate health professionals, legislators, institutions and the general public on the burden of chronic diseases in Virginia.
- Perform cancer surveillance. Collect reports of reportable cancers as defined by the Board of Health from a statewide network of hospital, laboratory, clinic, and physician reporters.
- Monitor the oral health status of targeted populations through collection, analysis and reporting. Evaluate existing prevention programs, knowledge of citizens and identify those indicators that place segments of the population at highest risk for oral disease.

Assure a Competent Workforce:

- Collaborate with other state agencies, academic institutions, and organizations to provide professional education and resources to Virginia's health professionals.
- Provide training and educational programs, workshops, and conferences.
- Provide technical assistance, consultation and guidance to local health districts and other community health professionals.
- Serve as the designated provider for Certified Health Education Specialists (CHES) seeking continuing education units (CEUs) in the field of health education.
- Ensure a competent oral health work force in public health dentistry through providing professional training and education to local health department dental staff that is certified by the Board of Dentistry for CEUs.
- Provide professional expertise and resources for recruitment and retention of the public health dentist work force.
- Provide training to professionals and service providers about oral health promotion, oral disease prevention, recognition and detection of oral health problems through screening.
- Train and educate dental, dental hygiene and medical students at Virginia's professional schools regarding dental public health statewide and programs.

Link People to Health Services:

Service Area Plan Page 5 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Service Area Products and Services

- Assure that high-risk populations have access to chronic disease prevention and control information and programs through partnerships, leveraging resources, and grants to community-based organizations, health systems, local health departments, and faith-based organizations.
- Identify resources and provide technical assistance to health care professionals and communities regarding culturally linguistic appropriate materials and programs.
- Collaborate with health care organizations to improve quality of chronic disease care for underserved populations including minority populations and persons living with disabilities.
- Develop, implement and monitor statewide population based prevention programs including community water fluoridation, school fluoride rinse and fluoride varnish programs.
- Provide consultation, technical assistance and on site review of clinical local health department dental programs using standardized guidelines.
- Provide technical assistance and training to ensure oral health integration in WIC, Head Start and Early Child Care, school-based programs, nursing home services, and community-based services, etc.
- Provide biopsy services for VDH dental patients statewide in order to improve early screening for oral cancer.

• Mobilize Community Partnerships:

- Convene and facilitate state coalitions and task forces to draw upon the full range of knowledge and resources available in Virginia to prevent and control chronic diseases.
- Develop working relationships with communities for the support of community mobilization and action including the development of local grassroots coalitions.
- Provide funding to local communities for initiatives related to chronic disease prevention, control and oral health.
- Serve on coalitions, advisory boards and groups whose focus is to improve oral health in the state to provide expert consultation on oral health delivery and programs.
- Provide technical assistance to local consortia in developing, preparing, and submitting funding proposals related to access to oral health.

Develop Policies and Plans:

- Lead in state planning for chronic disease prevention and control and the development of state plans that contain priorities, partners and resources needed to prevent and control chronic diseases.
- Develop strategic plans that include measurable health objectives.
- Develop and support health promotion policies regarding chronic disease prevention and control (e.g., Clean Indoor Air Act).
- Establish standards of practice for chronic disease prevention initiatives and promote best practices for prevention and care.
- Work with allied agencies in promoting changes to the environment that contribute to improvement in overall health.
- Monitor oral health related legislation and complete legislative studies or assignments. Promulgate regulations and adopt rules and regulations related to oral health.
- Provide expertise to governmental bodies (at all levels) developing oral health related laws, policies, and regulations.
- Interact with agencies, divisions, offices, societies, coalitions, task forces, commissions, boards and advisory councils to reduce barriers and improve availability of effective oral health services statewide.
- Provide leadership, expertise and participate actively in statutory, regulatory, legislative and

Service Area Plan Page 6 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Service Area Products and Services

standards development related to oral health care benefits, insurer/health plans, and public health standards.

- Inform and Empower People:
 - Develop and conduct social marketing and health communication campaigns that educate Virginians about ways to prevent and control chronic diseases.
 - Collaborate with health care professionals, universities, schools, churches and worksites to promote and reinforce health promotion messages and programs.
 - Contribute state surveillance data to state and national cancer surveillance programs and plans that are used to educate the public.
 - Research, procure and disseminate educational materials.
 - Provide consumer training and education regarding risk factors, disease development, and prevention of chronic diseases.
 - Provide expertise, resources, and technical assistance to educate and empower the public about current oral health problems and solutions.
 - Promote positive oral health attitudes and behaviors through population-based oral health education, training and promotion campaigns in various community settings.
 - Develop scientifically based and culturally appropriate oral health materials that are linguistically and age appropriate including materials in other languages.
 - Serve as a central resource for staff, education and prevention materials for dental public health staff, teachers, early childhood providers and community partners.
- Evaluate Effectiveness, Accessibility and Quality:
 - Conduct ongoing evaluation of chronic disease programs and services to assess and improve program effectiveness and to provide information necessary for allocating resources and reshaping programs and services.
 - Perform quality assurance activities to ensure the accuracy and completeness of cancer surveillance data.
 - Collect and report dental clinical services and services of the local health department dental programs statewide.
 - Survey and maintain data regarding the fluoridation status of 1,310 adjusted water systems to include population served, equipment age, sources of fluoride and local Office of Drinking Water Field Inspection Reports.
 - Monitor 1,310 adjusted water systems for compliance. Export the data to the Centers for Disease Control and Prevention Water Fluoridation Reporting System.
 - Collect, maintain and refer from a resource directory on the availability of safety net dental services statewide.

Service Area Plan Page 7 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Factors Impacting Service Area Products and Services

- Changes in scopes of services from funding sources may change the specific types of chronic disease prevention products and services provided.
- The award of grants from funding sources such as CDC directly affects non-general funds available to support service delivery.
- A 2002 Survey by VDH of Virginia's community water systems adjusted with fluoride showed that many of the systems which began fluoridation between 1950 and 1970 require significant replacement of fluoridation equipment or entirely new fluoridation systems as they transition into new water facilities. This trend is expected to continue as VDH responds to the highest priority funding requests for fluoridation.
- There have been efforts of anti-fluoridation groups to discontinue or inhibit fluoridation in community water systems. VDH has provided assistance in the form of scientific information and attendance at public hearings if requested by the community.
- Multiple well sites, substandard infrastructures, and insufficient personnel to provide fluoridation at multiple sites make fluoridation not feasible for many small communities that would otherwise benefit from fluoridation.

Anticipated Changes To Service Area Products and Services

- Medicaid Dental utilization was 23.4% in 2002. Efforts are under way to increase the number of dentists participating in the program through a single vendor system. The need for education and case management will increase the utilization of services and demand by these patients.
- With the new focus on early child and adult oral health programs, it is anticipated that new partnerships will create an increased demand for these products and increased requests for training and education in these areas.
- The Divisions of Chronic Disease Prevention and Control and Dental Health use funding from the Federal Preventive Health and Health Services Block Grant. This funding source was greatly reduced in 2006 and has been eliminated from the President's proposed 2007 Federal budget and will impact on non-general fund levels. Possible shifts in this funding source could affect leadership capacity, coordination of chronic disease services and cause elimination or reduction in services.
- The Tobacco Use Control Project anticipates a reduction in funding allocation in the proposed FY07 federal budget. The reduction could affect mobilization, development and actions of local grassroots coalitions.

Service Area Plan Page 8 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Service Area Financial Summary

The Division of Chronic Disease Prevention and Control receives multiple CDC categorical grants for services including: arthritis (\$139,000), asthma (\$350,000), comprehensive cancer control (\$290,000), cancer registry program (\$727,359), heart disease and stroke (\$1,221,983), diabetes (\$360,500) and tobacco use control (1,192,109). The Preventive Health and Health Services Block Grant also supports the Division with \$643,405. Approximately \$525,376 of state General Funds are received and used as federal grant matches for the Virginia Cancer Registry and the Cardiovascular Health Project.

A major source of funding for the oral health portion of this service area is the Maternal Child Health (Title V) Block Grant from the Health Resources and Services Administration (HRSA.) Approximately \$500,000 of the budget is federal Title V funding that does not require a state match and \$650,000 is Title V funding that requires a state match (\$3 state to \$4 federal.) \$65,000 of oral health funds are from a categorical HRSA grant that does not require state matching funds. \$550,000 in state General Funds directly support oral health in this service area. Preventive Health and Health Services Block Grant also provides funding of \$28,500 to the oral health program.

The oral health portion of the service area uses \$325,000 of General Funds to contract with dental students and dentists to obligate practice to an area of need in return for payment of dental school tuition or loans. Approximately \$200,000 of Title V funds that require state match is dispersed through contracts to government owned water systems to initiate or upgrade fluoridation equipment.

	Fiscal Year 2007		Fiscal Year 2008	
	General Fund	Nongeneral Fund	General Fund	Nongeneral Fund
Base Budget	\$867,994	\$4,048,246	\$867,994	\$4,048,246
Changes To Base	\$360,322	\$134,452	\$260,322	\$134,452
SERVICE AREA TOTAL	\$1,228,316	\$4,182,698	\$1,128,316	\$4,182,698

Service Area Plan Page 9 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Service Area Objectives, Measures, and Strategies

Objective 43015.01

Improve health outcomes and quality of life by addressing risk factors and/or disease management practices contributing to chronic disease morbidity and mortality in Virginia.

Chronic diseases are a major contributor to the premature death and disability of American adults. Not only does chronic diseases account for 70 percent of all deaths in the United States but more than 90 million Americans live with chronic illnesses. The cost of people with chronic diseases account for more than 60 percent of the nation's medical-care costs and chronic diseases account for one third of the years of potential life lost before age 65.

In Virginia, in 2004, heart disease, cancer, and stroke are the top three leading causes of death and diabetes is the sixth leading cause of death as cited in the Virginia Vital Statistics Report. A strong chronic disease prevention program supports promoting healthy behaviors, expanding the use of early detection practices, providing health education in community and school settings, and working to develop healthy communities.

Modifiable behaviors that contribute to the development and/or complications of major chronic diseases include: physical inactivity, healthy weight maintenance, and use of tobacco products. In addition, improper care of an existing health condition such as high blood pressure or diabetes can lead to comorbidity of chronic diseases.

Tooth decay remains the most common chronic disease among Virginia's children with approximately 50 percent of children surveyed affected and fluoride is the primary way to prevent this disease. Population based prevention such as community water fluoridation and the school fluoride topical rinse program reduce decay up to 40 percent and 15 percent, respectively. Another prevention program utilizes topical fluoride varnishes through training for dental and non-dental providers to reduce decay rates in preschool children. DDH works to prevent other dental diseases such as oral cancer through screening and biopsy services.

This Objective Supports the Following Agency Goals:

• Promote systems, policies and practices that facilitate improved health for all Virginians.

(This objective supports the long-term objectives of Virginia, as determined by the Council on Virginia's Future, to "inspire and support Virginians toward healthy lives and strong and resilient families.")

This Objective Has The Following Measure(s):

Service Area Plan Page 10 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Measure 43015.01.01

Percentage of adults 50 years and older who had a sigmoidoscopy or colonoscopy (colorectal cancer screening) within the preceding five years.

Measure Type: Outcome Measure Frequency: Other

Measure Baseline: 2001: 42.8%

Measure Target: 56% by end of FY07.

Measure Source and Calculation:

This measure is calculated using Behavioral Risk Factor Surveillance data for Virginia. The number of adults who reported having each of the above screening tests is divided by the sample. Percentages are weighted using the general population estimates for that year. These data are collected and analyzed biannually. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available BRFSS data will have been collected in 2005.

Measure 43015.01.02

Rate of hospitalizations per 10,000 with a primary diagnosis of asthma for children and adults age five to 64 years

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: 2001: 10.5 hospitalizations per 10,000

Measure Target: 7.0 by end of FY07.

Measure Source and Calculation:

This measure is calculated using the most recently available hospital discharge data from Virginia Health Information, Inc. The number of hospitalizations for the primary diagnosis of asthma is divided by the corresponding population estimate for that year. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available hospitalization data will have been collected in 2005.

Measure 43015.01.03

Adult population diagnosed with diabetes who had hemoglobin Alc checked.

Measure Type: Outcome Measure Frequency: Other

Measure Baseline: 2000-2002: 72.5% Measure Target: 74% by end of FY07.

Measure Source and Calculation:

This measure is calculated using Behavioral Risk Factor Surveillance (BRFSS) data for Virginia. The number of adults with diabetes engaged in a diabetes management practice is divided by the number of respondents with diabetes. Percentages are weighted using the general population estimates for that year.

At least two years of combined data is used for this calculations in order to accurately estimate the population engaged in diabetes management practices. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available BRFSS data will have been collected in 2004 and 2005.

Service Area Plan Page 11 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Measure 43015.01.04

Percentage of adult population 18 years and over whom smoke.

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: 2002: 24.6%

Measure Target: 19% by end of FY08.

Measure Source and Calculation:

This measure is calculated using Behavioral Risk Factor Surveillance data for Virginia. The number of adults who reported smoking cigarettes every day or some days is divided by the sample. Percentages are weighted using the general population estimates for that year. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available BRFSS data will have been collected in 2005.

Measure 43015.01.05

Percentage of adult population 18 years and over experiencing a limitation in physical activity due to arthritis.

Measure Type: Outcome Measure Frequency: Other

Measure Baseline: 2001-2003: 32% Measure Target: 30% by end of FY07.

Measure Source and Calculation:

This measure is calculated using Behavioral Risk Factor Surveillance data for Virginia. The number of adults reported experiencing a limitation in physical activity due to arthritis is divided by the total number of adults with arthritis. Percentages are weighted using the general population estimates for that year.

At least two years of combined data is used for these calculations in order to accurately estimate the population with arthritis experiencing a limitation in physical activity. These data are collected and analyzed biannually. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available BRFSS data will have been collected in 2004 and 2005.

Measure 43015.01.06

Percentage of adult population 18 years and over who are obese.

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: 2002: 23.7%

Measure Target: 22% by end of FY07.

Measure Source and Calculation:

This measure is calculated using Behavioral Risk Factor Surveillance data for Virginia. The number of adults reported is divided by the population estimate for that year. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available BRFSS data will have been collected in 2005.

Service Area Plan Page 12 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Measure 43015.01.07

Percentage of men 50 years and older who have ever received a prostate-specific antigen (PSA) test (prostate cancer screening).

Measure Type: Outcome Measure Frequency: Other

Measure Baseline: 2001: 76%

Measure Target: 78% by end of FY07.

Measure Source and Calculation:

This measure is calculated using Behavioral Risk Factor Surveillance data for Virginia. The number of adults who reported having each of the above screening tests is divided by the sample. Percentages are weighted using the general population estimates for that year. These data are collected and analyzed biannually. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available BRFSS data will have been collected in 2005.

Measure 43015.01.08

Percent of men 40 years and older who have ever received a digital rectal exam (DRE) (prostate cancer screening).

Measure Type: Outcome Measure Frequency:

Measure Baseline: 2001: 79.4%

Measure Target: 82% by end of FY07.

Measure Source and Calculation:

This measure is calculated using Behavioral Risk Factor Surveillance data for Virginia. The number of adults who reported having each of the above screening tests is divided by the sample. Percentages are weighted using the general population estimates for that year. These data are collected and analyzed biannually. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available BRFSS data will have been collected in 2005.

Measure 43015.01.09

Percentage of adult population 18 years and over having high blood pressure.

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: 2002: 25.4%

Measure Target: 23.5% by end of FY07.

Measure Source and Calculation:

This measure is calculated using Behaviorial Risk Factor Surveillance data for Virginia. The number of adults reported having each of the above risk factors is divided by the population estimate for that year. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available BRFSS data will have been collected in 2005.

Service Area Plan Page 13 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Measure 43015.01.10

Number of children participating in the school fluoride rinse program.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: The number of children participating in the fluoride rinse program in FY06

was 47,000.

Measure Target: 48,000 by end of FY07.

Measure Source and Calculation:

Division of Dental Health (DDH) administers the fluoride rinse program through working directly with school nurses and volunteers in 200 schools in 51 counties. Children who participate in this program must sign permission forms annually. Schools are closely monitored and report the number of children with signed permission forms by school and county to the program coordinator in DDH during the school year.

Measure 43015.01.11

Number of citizens served by community water systems with optimally fluoridated water.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: 5,802,072 citizens in FY06. **Measure Target:** Maintain 5,802,072 during FY07.

Measure Source and Calculation:

This measure is calculated based on information from the State Safe Drinking Water Information System (SIDWIS) administered by the Office of Drinking Water. Data available for 1,370 community water systems is imported into the Fluoride Monitoring System Database, which reports population data on each water system. Virginia has met the federal Healthy People Objective for 2010 for community water fluoridation. Although small initiations are planned, resources (staff time and funding) are primarily utilized to maintain safe, optimal fluoridation through upgrades of aging equipment in water systems.

Measure 43015.01.12

Percentage of adult population 18 years and over having high blood cholesterol.

Measure Type: Outcome Measure Frequency: Annually

Measure Baseline: 2002: 33.6%

Measure Target: 32% by end of FY07.

Measure Source and Calculation:

This measure is calculated using Behaviorial Risk Factor Surveillance data for Virginia. The number of adults reported having each of the above risk factors is divided by the population estimate for that year. The measure target year reflects the year when the data is available for reporting, not the year when it is collected. In 2007, the most recently available BRFSS data will have been collected in 2005.

Objective 43015.01 Has the Following Strategies:

DCDPC will collaborate with state and local organizations and local health departments to increase
adherence to National Asthma Education and Prevention Program (NAEPP) guidelines among
healthcare professionals and persons with asthma. The ultimate goal of the NAEPP is to enhance the
quality of life for patients with asthma and decrease asthma-related morbidity and mortality.

Service Area Plan Page 14 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

- DCDPC will promote the use of the Chronic Care Model and the Cardiovascular Disease collaboratives in federally qualified health centers (FQHCs) to bring state-of-the-art techniques in disease management to those most in need.
- DCDPC will promote the adoption of evidence-based guidelines by hospitals as the American Heart Association's Get With the Guidelines-Coronary Heart Disease and Stroke modules and the American College of Cardiology's Guidelines Applied to Practice to improve quality of care.
- DCDPC will aim to reduce health disparities by partnering with grassroots groups, including faithbased organizations, to target high-risk populations.
- DCDPC will collaborate with partners to promote effective evidenced-based interventions and physical activity programs that will lead to improving quality of life and reducing the proportion of people with chronic joint symptoms who experience a limitation in activity due to arthritis.
- DCDPC will partner with organizations serving individuals with disabilities to increase the number of people with disabilities reporting participation in leisure time activities.
- DCDPC will partner with organizations to enact policy changes with respect to smoke-free environments.
- DCDPC will enact a tobacco cessation quitline program to reduce the number of current smokers.
- DCDPC will collaborate with organizations and key stakeholders to develop, implement, promote, and evaluate effective strategies for the early detection and prevention of cancer.
- DDH will work with the Office of Drinking Water to create a database and maintain a current census
 of water systems that fluoridate to be utilized to target areas for fluoridation funding and
 populations affected.
- DDH will provide technical assistance to citizens, engineers and waterworks operators regarding the oral health benefits of fluoridation through utilizing the DDH and CDC web sites.
- DDH will provide the benefits of optimal community water fluoridation to citizens in communities through grant funding to initiate or upgrade fluoride water system equipment.
- DDH will administer a school based fluoride rinse program to provide topical fluoride to schoolchildren. In doing so, DDH will target those children who do not have access to fluoridated water systems at home.
- DDH will regularly update the "Bright Smiles for Babies" fluoride varnish training program through collaboration with knowledgeable partners and current research to provide current training for dental and non-dental providers through various settings, private and public.
- DDH will work with the Department of Medical Assistance Services regarding establishing fees for the dental varnish as a medical service to increase program participation by non-dental health professionals.
- DDH will administer the school based fluoride rinse program through developing guidelines/standards for the program, providing on-site program monitoring, training school personnel and purchasing fluoride for all children in the program.
- Inform, educate and empower Virginians (especially high risk populations and the organizations that serve them) about oral health and chronic disease prevention and control issues and best practices.
- Mobilize and sustain partnerships with coalitions, task groups and councils to develop policies and plans, and implement and evaluate chronic disease prevention initiatives.

Service Area Plan Page 15 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

• The Division of Chronic Disease Prevention and Control (DCDPC) will collaborate with state and local organizations, local health departments, and faith-based organizations to increase self-management practices among persons with diabetes.

Objective 43015.02

Support the development of a competent dental public health workforce.

The VDH dental public health workforce consists of more than 100 dentists, dental assistants and dental hygienists who provide dental clinic services in 25 local health districts statewide. There is a unique need for technical assistance regarding the practice of dentistry, review and training for staff, which is fulfilled by the Division of Dental Health (DDH.) Additionally, on-site clinical reviews of dentist staff by the Division are one method of directly evaluating the quality of care in local health department programs.

This Objective Supports the Following Agency Goals:

• Provide strong leadership and operational support for Virginia's public health system.

(This objective also aligns with to the long-term objective of Virginia, to "be recognized as the best managed state in the nation.")

This Objective Has The Following Measure(s):

Measure 43015.02.01

Number of VDH dental clinic site reviews, recruitment contacts, orientations and technical assistance encounters with local health directors, Community Health Services staff and public health dental staff.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: 325 documented contacts in FY06.

Measure Target: Maintain 325 documented contacts during FY07.

Measure Source and Calculation:

One-third of dental clinical programs are reviewed annually through site visits. Orientation of new staff is documented through correspondence with the health directors. Technical assistance requests regarding the practice of public health dentistry will be documented through email correspondence. A log is currently maintained of recruitment contacts.

Objective 43015.02 Has the Following Strategies:

- DDH will assist in providing technical assistance oversight and review of districts that choose to use federal funding for dental initiatives.
- DDH will provide technical assistance regarding the practice of public health dentistry to local health districts and Community Health Services staff including providing orientation to new dental staff
- DDH will collaborate with Community Health Services to provide a centralized recruitment for dentist vacancies within VDH.
- DDH will inform/train staff of dental public health workforce standards through maintaining a
 Manual of Operations for VDH Public Health Dental Programs.
 DDH will support training for members of the public health dental workforce, including
 opportunities for formal and informal learning.
- DDH will review one third of VDH clinical programs through site visits annually.
- DDH will support training for members of the public health dental workforce, including opportunities for formal and informal learning.

Service Area Plan Page 16 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Objective 43015.03

Monitor the burden of chronic disease and oral health status of the population through data collection, reporting, and program evaluation.

The Divisions of Chronic Disease Prevention and Control and Dental Health collect and analyze surveillance data for the purposes of reducing the burden of chronic disease. This includes identifying prevalence of disease, incidence, and risk factors associated with chronic disease, producing data reports, fact sheets, and summaries for use in program planning and policy development, and dissemination of information to internal and external partners, decision-makers, and the general public.

This Objective Supports the Following Agency Goals:

• Collect, maintain and disseminate accurate, timely, and understandable public health information. ((This objective is aligned with Virginia's long-term objective to inspire and support Virginians toward healthy lives and strong and resilient families.))

This Objective Has The Following Measure(s):

Measure 43015.03.01

Percent of project areas provided with cancer incidence, chronic disease mortality, hospitalization, prevalence, and risk factor data.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: 2004: 100%

Measure Target: Maintain 100% during FY07.

Measure Source and Calculation:

This measure requires the use of surveillance data from several sources: the VDH Center for Health Statistics for mortality data, Virginia Cancer Registry for cancer incidence data, Virginia Health Information, Inc. for hospitalization data, and the Behavioral Risk Factor Surveillance System for risk factor and management practice data. Percentages and rates are calculated based on a positive response to a question, or a person experiencing an actual event (e.g., cancer diagnosis, death), and those numbers are divided by a corresponding population estimate. Epidemiologists within the Division of Chronic Disease Prevention and Control are expected to collect, analyze, and report these data, where available, to projects for arthritis, asthma, cancer, diabetes, heart disease and stroke, and tobacco use control.

Measure 43015.03.02

Percent of cancer cases reported to the Virginia Cancer Registry.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: 2002: 82.9%

Measure Target: 95% by end of FY07.

Measure Source and Calculation:

The Virginia Cancer Registry is the state central cancer registry. The registry maintains a database of cancer incidence reports. The registry describes the cancer burden in the state by summing all cancer cases with a diagnosis date within a particular year. Percentage estimates of cancer case ascertainment completeness will be calculated using a method established by the Centers for Disease Control and Prevention's National Program of Cancer Registries.

Service Area Plan Page 17 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Measure 43015.03.03

Availability of cancer incidence data tables in hard copy and electronic format.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: 2004: 100% available

Measure Target: Maintain 100% during FY07.

Measure Source and Calculation:

Data will be aggregated based on reports of diagnosed cancer received by the Virginia Cancer Registry. The cancer incidence data will be aggregated, analyzed and prepared as frequencies and rates. Frequencies and rates will be summarized by cancer site, cancer stage at diagnosis (where appropriate), age, race, sex, county or city of residence, and health district of residence.

Measure 43015.03.04

Number of dental clinical services reports produced to document statewide and local health department oral health services.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: Two reports in FY06.

Measure Target: Maintain two reports during FY07.

Measure Source and Calculation:

DDH collects data from local health department dental programs regarding services as classified by American Dental Association Code. Reports are produced in Microsoft Excel and are distributed to health districts twice a year.

Measure 43015.03.05

Number of water systems monitored for compliance with Centers for Disease Control and Prevention (CDC) fluoride standards.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: 1,276 in FY06.

Measure Target: Maintain 1,276 during in FY07.

Measure Source and Calculation:

DDH collects information regarding the daily fluoride levels in all water systems that add fluoride to their drinking water from the Office of Drinking Water Field Offices. This information is compared to the split sample analysis reported from the Division of Consolidated Laboratories for accuracy regarding the number of reports per month, and the number of samples that vary from the optimal level. This information is exported to the CDC for a compliance report monthly by DDH staff.

Service Area Plan Page 18 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

Measure 43015.03.06

Number of oral health reports produced using statewide, district and community level data.

Measure Type: Output Measure Frequency: Annually

Measure Baseline: Ten reports in FY06.

Measure Target: Maintain ten reports during FY07.

Measure Source and Calculation:

DDH is the primary source for oral health data reports. Data reports are produced at the district, community and statewide level on a number of dental disease indicators including dental decay, fluorosis and oral cancer.

Objective 43015.03 Has the Following Strategies:

- DCDPC epidemiologists will produce and disseminate a statewide chronic disease burden report every three years.
- DCDPC epidemiologists will produce fact sheets, reports, and presentations on chronic disease morbidity and mortality for each project area to inform program planners and key stakeholders.
- Virginia Cancer Registry will collect, analyze, and record cancer incidence reports for the population of Virginia in accordance with state regulations and federal program guidelines.
- Virginia Cancer Registry will analyze cancer incidence data annually in order to update and disseminate incidence data tables.
- DDH will perform accurate, periodic assessments, analysis and reporting of the oral health status of its citizens through surveys of school children.
- DDH will participate in the Behavioral Risk Factor Surveillance System (BRFSS) and report that data annually.
- DDH will provide reports and data to customers and partners on a regional and state level as
 available regarding oral health indicators of disease to be utilized for program planning and grant
 applications.
- DDH will identify health status indicators of groups that are at higher risk than the total population for oral disease and report those risks through publishing information and placing it on the website.
- DDH will utilize appropriate methods for data collection including approval from the Institutional Review Board (IRB,) and using software including geographic information systems (GIS), to interpret and communicate data to diverse audiences.
- DDH will monitor 1,310 adjusted water systems for compliance and export the data to the Centers for Disease Control and Prevention Water Fluoridation Reporting System.
- DDH will survey and maintain data regarding the fluoridation status of 1,310 adjusted water systems to include population served, equipment age, sources of fluoride and local Office of Drinking Water Field Inspection Reports.
- DDH will evaluate preventive programs based on analyses of health status and outcome data to
 determine program effectiveness and to provide information necessary for allocating resources and
 reshaping programs for improved efficiency, effectiveness, and quality.
- DDH will collect and report dental clinical services and services of the local health department dental programs statewide.

Service Area Plan Page 19 of 20

Department of Health

Chronic Disease Prevention, Health Promotion, and Oral Heath (43015)

- DDH will utilize data to track measurable oral health objectives including Healthy People 2010 Goals and Maternal and Child Health Performance Measures, plan long-term statewide oral health strategies and assist communities to develop action plans regarding oral health initiatives.
- Virginia Cancer Registry will provide cancer surveillance statistics to local, state, and national coalitions, partners, and organizations.

Service Area Plan Page 20 of 20